

## CLAIMS:

1. A method of scaling a three-dimensional model (100) into a scaled three-dimensional model (108) in a dimension which corresponds to a viewing direction of a viewer towards the three-dimensional model (100), characterized in that scaling is based on properties of human visual perception of the viewer.

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2. A method as claimed in Claim 1, characterized in that a first one of the properties of human visual perception is sensitivity to a discontinuity (109-113) in the three-dimensional model (100) in a dimension which is related with depth.

10 3. A method as claimed in Claim 1, characterized in that a second one of the properties of human visual perception is sensitivity to a difference of luminance values between neighboring pixels of a two-dimensional view (312) of the three-dimensional model (100).

15 4. A method as claimed in Claim 1, characterized in that a third one of the properties of human visual perception is sensitivity to a difference of color values between neighboring pixels of a two-dimensional view (312) of the three-dimensional model (100).

20 5. A method as claimed in Claim 2, characterized in that the method comprises a discontinuity detection step to detect a  $C_o$ -discontinuity (109-113) in the three-dimensional model (100) in the dimension which is related with depth.

25 6. A method as claimed in Claim 3, characterized in that the method comprises:  
- a luminance contrast detection step to determine a particular luminance contrast value of a particular pixel with a neighboring pixel, with the particular pixel belonging to a two-dimensional image (312) which is a view of the three-dimensional model;  
and

- a luminance contrast dependent scaling step to scale a depth value of an element which corresponds with the particular pixel on basis of the particular luminance contrast value.

5 7. A method as claimed in Claim 4, characterized in that the method comprises:

- a color difference detection step to determine a particular color difference value of a particular pixel with a neighboring pixel, with the particular pixel belonging to a two-dimensional image (312) which is a view of the three-dimensional model; and
- a color difference dependent scaling step to scale a depth value of an element

10 which corresponds with the particular pixel on basis of the particular color difference value.

8. A method as claimed in Claim 1, characterized in that the method comprises:

- a range detection step to estimate a range of depth values in a portion of the three-dimensional model in the dimension which is related with depth; and
- a comparison step to compare the range of depth values with an output range

15 of depth values.

9. A scaling unit (200, 201, 203, 300) for scaling a three-dimensional model (100) into a scaled three-dimensional model (108) in a dimension which corresponds to a viewing direction of a viewer towards the three-dimensional model, characterized in that the scaling unit (200, 201, 203, 300) is designed to scale on the basis of properties of human visual perception of the viewer.

10. An image display apparatus (400) comprising:

25 - receiving means (402) for receiving a signal representing a three-dimensional model (100);

- a scaling unit (404) for scaling the three-dimensional model (100) into a scaled three-dimensional model (108) in a dimension which corresponds to a viewing direction of a viewer towards the three-dimensional model; and

30 - display means (406) for visualizing a view of the scaled three-dimensional model (108), characterized in that the scaling unit (404) is designed to scale on the basis of properties of human visual perception of the viewer.